

Amendments to the Claims

Please cancel claims 1, 4, 8, 11, 15, 20, 22, 32, 35, 70 and 71, amend claims 38, 61, 64 and 67, and add new claims 82 – 112, as indicated below.

Claims 2-3, 5-7, 9-10, 12-14, 16-19, 21, 23-31, 33-34, 36-37, 39, 41, 43-50, 52-53, 55, 57-60, 62-63, 65-66, 68-69, and 72-81 were previously cancelled. Thus, claims 1-37 and 68-81 are now cancelled, and claims 42, 51, 54, 56, 64, 67 and 82 - 112 are pending.

The following listing of the claims replaces all prior listings.

Claims 1-37. Cancelled.

38. (currently amended) A device for delivering a volatile substance comprising:
an active layer having a first side and an opposite side, the active layer being a dried polymer solution having the volatile substance; and
a first release liner in direct contact with the active layer, and covering ~~a~~ the first side of the active layer.

Claim 39. Cancelled

40. (original) A device in accordance with claim 38, wherein a polymer in the polymer solution is a polyurethane.

Claim 41. Cancelled

42. (original) A device in accordance with claim 38, wherein the volatile substance includes at least one of an aromatherapy agent; an aromatherapy oil, a therapeutic agent, a deodorizer, a perfume, an insect repellent, a botanical extract, a botanical oil, and a masking odor.

Claims 43-50. Cancelled

51. (original) A device in accordance with claim 38, wherein the active layer is a rate controlling active layer that includes a rate controlling composition that controls the rate of delivery of the volatile substance.

Claims 52-53. Cancelled

54. (original) A device in accordance with claim 51, wherein the rate controlling composition includes at least one of wax, silica, kaolin, chalk, diatomaceous earth, bentonite, titanium dioxide, glass particulates, and metal particulates.

Claim 55. Cancelled

56. (original) A patch for delivering a volatile substance in accordance with claim 38 further comprising:
a barrier layer disposed on an opposite side of the active layer from the first release liner.

Claims 57-60. Cancelled

61. (currently amended) A ~~patch~~ device in accordance with claim 56 further comprising:
a first adhesive layer adjacent to an opposite side of the barrier layer from the active layer.

Claims 62-63. Cancelled

64. (currently amended) A ~~patch~~ device in accordance with claim 61 further comprising:
an intermittent mask layer covering a portion of the first adhesive layer, the intermittent mask layer leaving adhesive exposed on a fraction of a total area of a side of the barrier layer.

Claims 65-66. Cancelled

67. (currently amended) A ~~patch device~~ in accordance with claim 56 further comprising:
a second release liner attached to an opposite side of the barrier layer from the active layer.

Claims 68-81. Cancelled

82. (new) A method for making the active layer of a device as claimed in claim 38, the method comprising:

providing a polymer solution including a polymer, a solvent, and the volatile substance;

applying the polymer solution to a side of the first release liner; and

drying the polymer solution to create an active layer having a first side and an opposite side.

83. (new) A method according to claim 82, further comprising:

positioning a barrier layer disposed on the opposite of the active layer from the release liner, the barrier layer having a first side and an opposite side.

84. (new) A method according to claim 83, further comprising:

attaching the first side of the barrier layer to the opposite side of the active layer from the first release liner by a first adhesive layer;

attaching a second release liner to the opposite side of the barrier layer from the active layer by a second adhesive layer.

85. (new) A method according to claim 84, wherein the step of attaching a second release liner occurs before the step of attaching the barrier layer.

86. (new) A method according to claim 84, wherein the barrier layer is a double coated tape, a first side of the double coated tape barrier layer covered by the first adhesive layer

and the opposite side of the double coated tape barrier layer covered by the second adhesive layer, wherein positioning further comprises:

attaching the double coated tape to the opposite side of the active layer from the first release liner by the first adhesive layer.

87. (new) A method according to claim 83, further comprising:

applying a fractional adhesion layer for attaching the device to a surface to the opposite side of the barrier layer from the active layer, wherein the fractional adhesion layer has an adhesion area that is a fraction of a total surface area of the opposite side of the barrier layer.

88. (new) A method according to claim 87, wherein applying the fractional adhesion layer further comprises:

adhering a mask layer to the opposite side of the barrier layer; and

applying the adhesive to the mask layer in an area that is a fraction of the total surface area of the opposite side of the barrier layer.

89. (new) A method according to claim 87, wherein applying the fractional adhesion layer further comprises:

applying an intermittent mask layer to cover a portion of the adhesive layer, the mask layer leaving adhesive exposed on the adhesion area of the barrier layer.

90. (new) A method according to claim 89, wherein applying the intermittent mask layer further comprises:

applying an intermittent protective coating, the coating leaving adhesive exposed on the adhesion area of the barrier layer, and wherein the intermittent mask layer is one of a perforated film and a film with removed segments.

91. (new) A method according to claim 87, wherein the step of applying the fractional adhesion layer occurs before the step of positioning the barrier layer.

92. (new) A method according to claim 87, wherein the barrier layer is a double coated tape, the first side of the double coated tape covered with a first adhesive layer and the opposite side of the barrier layer covered with a second adhesive layer, wherein positioning further comprises:

applying an intermittent mask layer to the first adhesive layer of the double coated tape, the intermittent mask layer leaving adhesive exposed on the adhesion area of the barrier layer; and

attaching the first side of the double coated tape to the active layer with the first adhesive layer.

93. (new) A method according to claim 92, wherein applying the intermittent mask layer further comprises:

applying an intermittent protective coating, the coating leaving adhesive exposed on the adhesion area of the barrier layer, and wherein the intermittent mask layer is one of a perforated film and a film with removed segments.

94. (new) A method according to claim 93, wherein applying the intermittent mask layer occurs before positioning the barrier layer.

95. (new) A method according to claim 82, wherein the polymer solution is hydrophilic.

96. (new) A method according to claim 82, wherein the polymer is a polyurethane.

97. (new) A method according to claim 96, wherein the polyurethane comprises polyurethane-1.

98. (new) A method according to claim 82, wherein the volatile substance includes at least one of an aromatherapy agent; an aromatherapy oil, a therapeutic agent, a deodorizer, a perfume, an insect repellant, a botanical extract, a botanical oil, and a masking odor.

99. (new) A method according to claim 82, wherein the polymer solution further comprises a thickener selected from the group consisting of a xanthan gum, a cellulose, a polyvinyl pyrrolidone, and a carbomer.

100. (new) A method according to claim 82, wherein the polymer solution further comprises a thickener is a combination selected from the group consisting of ammonium polyacrylates, isohexadecane and polyethylene glycol-40 castor oil. polyacrylamide, polydecene and ethoxylated lauryl alcohol; polyacrylamide, C₁₃₋₁₄ isoparaffin and ethoxylated lauryl alcohol; and polyquaternium 32 and mineral oil.

101. (new) A method according to claim 82, wherein the solvent is selected from the group consisting of an alcohol, a water and a first glycol.

102. (new) A method according to claim 82, wherein the polymer solution further comprises a plasticizer.

103. (new) A method according to claim 102, wherein the plasticizer comprises a second glycol.

104. (new) A method according to claim 102, wherein the first glycol and the second glycol are the same or different glycol.

105. (new) A method according to claim 82, wherein in drying, the created active layer is selected from the group consisting of a gel, a semi-solid and a solid.

106. (new) A method according to claim 82, wherein applying further comprises:
applying the polymer solution to create a surface with a high specific surface area so as to deliver the volatile substance at an enhanced rate.

107. (new) A method according to claim 106, wherein applying further comprises entraining the polymer solution with bubbles to create the surface with the high specific surface area.

108. (new) A method according to claim 82, wherein the polymer solution further comprises a rate controlling composition for delivering a volatile substance at a controlled rate.

109. (new) A method according to claim 108, where the rate controlling composition further comprises another polymer selected from the group consisting of a gum, a polyolefin, a polyvinyl pyrrolidone, an ethylenevinyl acetate copolymer, a polyether esteramide, a cellulose derivative, a polyethylene, a polyester, a polystyrene, and a polyamide.

110. (new) A method according to claim 108, wherein the rate controlling composition comprises a substance selected from the group consisting of wax, silica, kaolin, chalk, diatomaceous earth, bentonite, titanium dioxide, glass particulates, and metal particulates.

111. (new) A method according to claim 108, wherein the rate controlling composition comprises an encapsulating device containing the volatile substance.

112. (new) A method for making the active layer of a device as claimed in claim 38, wherein the method comprises:

providing a polymer solution comprising a polymer, a solvent and the volatile substance;

applying the polymer solution to a first side of a breathable layer, an opposite of the breathable layer from the polymer solution being covered at least in part by a release liner, the breathable layer controlling the rate of delivery of the volatile substance; and

drying the polymer solution to create the active layer, wherein the active layer delivers the volatile substance in a controlled manner.